Vehicle-Infrastructure Integration

Strategic and Business Plan Summary

Currently, 42,000 people die an nually on our roadways nationwide. Traffic accidents are the leading cause of death for people between the ages of 4 and 33. Fifty percent of the deaths occur from intersection collisions and vehicles leaving the roadway. Annual traffic crashes cost the American economy 230 billion, and traffic congestion costs 63 bil lion while wasting 56 billion gallons of fuel. Traffic congestion continues to increase and gridlock occurs in major cities worldwide.

Vehicle infrastructure integra tion VII offers a new approach to increasing the safety and mobility of our day to day travel. It also increas es the efficiency of our road systems and provides real commercial and economic benefits. Wireless technol ogy combined with GPS will enable vehicles to communicate with each other and with the roadway, and to identify and avoid hazardous traffic situations and unexpected traffic delays. Wireless technology will help increase the efficiency of traffic management, making our roadways safer to travel and decreasing congestion and the potential for traffic related incidents.

MDOT is actively involved in VII initiatives that will influence the safety of passengers in vehicles and how drivers make decisions based on information received from other vehicles and the roadway. The intent is to establish wireless connectivity among vehicles and to the roadside infrastructure to help save lives, time, and money and to spur eco nomic development. MDOT

VII Mission:

MDOT's VII mission is to partner with public agencies, the automotive industry, and the telecommunications industry to lead the nation in VII research and sustained VII deployment by providing the public foundation for Michigan's new automotive information technology industry and ensuring improvements in transportation systems safety and operational performance.

and its partners have developed a five year VII strategy to ensure this infrastructure is built in Michigan. MDOT's VII Strategic and Business Plan was formulated to align with its organizational mission "to pro vide the highest quality integrated transportation services for economic benefit and improved quality of life," which addresses the needs of MDOT customers and partners through improved safety, traffic management, and asset manage ment. The VII strategy focuses on partnering, developing, and deploy ing a VII infrastructure and test beds, increasing safety and mobility, improving asset management, devel oping outreach programs to better expose others to VII in Michigan, justifying the need for VII, and determining creative funding venues for VII.

MDOT's strategic plan captures the vision, mission, needs, goals, activities, and measures of success that will guide a coordinated, efficient, safe, and integrated vehicle infrastructure system throughout the state. The plan will initiate a course of action toward establishing the required public and private sector partnerships that will ensure leadership, innovation, and progress across Michigan. The plan includes partnering with key organizations and providing leadership, statewide and nationally, to research, develop, and deploy VII.

MDOT's Line of Business Strat egy Diagram for VII see back summarizes the VII Strategic and Business Plan by visually repre senting the strategic elements and interrelationships that will be taken in the next five years to achieve the VII mission and vision. Increased safety, more efficient mobility, and economic development are the primary end products for MDOT's pursuit of VII.

To ensure this plan is truly a working document, activities will be pursued, measured, and updated continuously. Some current activi ties include, but are not limited to, developing and forming relation ships and partnerships with OEMs, developing a Michigan VII working group, and partnering with other states and the U.S. DOT. Other activities include designing, testing, and deploying a wireless infrastruc ture; designing a self supporting test bed, active collision avoidance systems for safety, and en route accident/construction/event alerts for traffic management; and collect ing infrastructure deterioration data for asset management.

To view the complete MDOTVII Strategic and Business Plan and to learn more about VII activities in Michigan, go to www.michigan.gov/mdotvii.

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MDOT's Line-of-Business Strategy Diagram for VII

